

CLAIMS

1. A jitter correction apparatus comprising:

an output unit (13023, 13018) generating, in a MAC (Medium Access Control) layer, when data except for a beacon is received in a physical layer, transmission data based on said data received and outputting said transmission data through an interface
5 between said MAC layer and a LINK layer to said LINK layer;

a beacon detection signal output unit (11023, 13023) outputting, when data that is a beacon is received in said physical layer, a beacon detection signal from said MAC layer to said LINK layer; and

10 a correction unit (13051) using said beacon detection signal to correct, in said LINK layer, a clock frequency generation function of said LINK layer, wherein

said beacon detection signal output unit outputs, from said MAC layer to said LINK layer, said beacon detection signal with higher priority given thereto over said transmission data, without queuing said beacon detection signal together with said transmission data in said interface.

2. The jitter correction apparatus according to claim 1, further comprising:

a timer value generation unit (11008, 13051) using said clock frequency generation function to generate, in said LINK layer, a timer value based on the time of input of said beacon detection signal to said LINK layer; and

5 a beacon transmission unit (11011, 11012) adding a timer value (N) that is said timer value generated when a N-th beacon is received in said physical layer, to a (N+1)-th beacon to transmit said (N+1)-th beacon to another apparatus, wherein

10 said correction unit uses, when said (N+1)-th beacon is received in said physical layer, a difference between said timer value (N) added to said (N+1)-th beacon and a timer value (N+1) that is generated by said timer value generation unit when said (N+1)-th beacon is received in said physical layer to make a correction to said timer value

generation unit.

3. The jitter correction apparatus according to claim 1 or 2, wherein

said MAC layer and said LINK layer are connected by a transmission line without said interface therebetween,

5 said beacon detection signal output unit outputs said beacon detection signal through said transmission line from said MAC layer to said LINK layer without through said interface.

4. The jitter correction apparatus according to claim 1 or 2, wherein

said beacon detection signal output unit adds to said beacon detection signal an identifier indicting priority, and

5 said beacon detection signal is given higher priority over said transmission data based on said identifier in said interface and is output from said MAC layer to said LINK layer.

5. The jitter correction apparatus according to claim 2, further comprising:

a time stamp generation unit (11007) generating, in said LINK layer, for data that is input from an application layer to said LINK layer, time information based on the time of the input by using the timer value generated by said timer value generation unit;

5 a data transmission unit (11030) adding said time information generated by said time stamp generation unit to said data that is input from said application layer to transmit said data to another apparatus; and

10 a determination unit (13050, 130502) determining, when N-th data (N) to which the time information is added and (N+1)-th data to which the time information is added are input to said LINK layer, whether or not said data (N+1) is to be output from said LINK layer to the application layer, based on a difference between the time information added to said data (N) and the time information added to said data (N+1) as well as a

difference between a timer value based on the time of input of said data (N) to said LINK layer and a timer value based on the time of input of said data (N+1) to said LINK layer that are obtained using timer values generated by said timer value generation means.

6. A jitter correction apparatus comprising:

a reception unit (13003) receiving data in synchronization with another apparatus based on a beacon;

a definition unit (13002) defining transmission and reception of data in said reception unit; and

an access control unit (13001) outputting said data according to said definition unit, wherein

said access control unit includes:

an output unit (13023, 13018) outputting, when data except for a beacon is received by said reception unit, transmission data based on said data through an interface between said definition unit and said access control unit to said access control unit;

a beacon detection signal output unit (13023) outputting to said access control unit, when data that is a beacon is received by said reception unit, a beacon detection signal with higher priority given thereto over said transmission data, without queuing said beacon detection signal together with said transmission data in said interface; and

a correction unit (13051) using said beacon detection signal to make a correction to a clock frequency generation function included in said access control unit.

7. A jitter correction apparatus comprising:

a reception unit (13003) receiving data in synchronization with another apparatus;

a definition unit (13002) defining transmission and reception of data in said

5 reception unit;

an access control unit (13001) outputting said data according to said definition unit; and

an output unit (13023) outputting a signal used by said reception unit for receiving said data in synchronization with said another apparatus, from said reception
10 unit to said access control unit, wherein

said access control unit includes a synchronization unit using said signal to synchronize a clock frequency generation function of said reception unit with a clock frequency generation function of said access control unit.

8. A jitter correction apparatus comprising:

an output unit (13023, 13018) generating, in a MAC (Medium Access Control) layer, when data except for a signal used for ensuring synchronization of a physical layer is received in said physical layer, transmission data based on said data received and
5 outputting said transmission data through an interface between said MAC layer and a LINK layer to said LINK layer;

a detection signal output unit (13023) outputting from said MAC layer to said LINK layer, when said signal is received in said physical layer, a detection signal indicating that said signal is detected; and

10 a correction unit (13051) using said detection signal to make a correction, in said LINK layer, to a clock frequency generation function of said LINK layer, wherein

said detection signal output unit outputs, from said MAC layer to said LINK layer, said detection signal with higher priority given thereto over said transmission data, without queuing said detection signal together with said transmission data in said
15 interface.